as Mr. Gray, a few of the former impressions of some of the brightest moments of his life; while the fact that he did not live to see this parting effort fully realized, but died as the last sheet was passing through the press, will more than suffice to ensure a charitable judgment from even his most captious readers. Harder and more enduring work than this Mr. Clark did, and he did it well. From his earliest years he had been a patient student of Nature, and, catholic-minded, had delighted in *all* her works; and he was not only a careful describer, but likewise (which is even more important still) a genuine and enthusiastic *collector*—gaining his knowledge, perhaps, more from the woods and streams than from books. His earliest partiality was for plants; he then took to birds; then, with considerable energy, to spiders; afterwards to butterflies and moths, of which he formed a large and valuable collection; and, last of all, and most successfully, to beetles. It was, indeed, to the Coleoptera that the best labours of his life were devoted; and with the great departments of the *Phytophaga* and the water-beetles his name will be associated (in connexion with many admirable papers, catalogues, and monographs) as long as entomology continues to be studied, and cultivated as a science. Like many before him, he has passed from among us; but he has left a record behind which will, and must, endure.

MISCELLANEOUS.

Mermis nigrescens. By William Mitten, A.L.S.

The garden-hairworm has received so much attention this year and so much has been written respecting it by various observers since the past summer, without, however, clearing up some obscure portions of its history, that I have been tempted to contribute my mite in aid of its elucidation.

After showers, in the month of June, the hairworm has been repeatedly brought to me as a curiosity for the microscope; but my own practical acquaintance with it commenced about eight years ago, when, having grafted a number of small plants of whitethorn, about a foot high, with pears, I was continually annoyed by finding the bursting buds eaten off during the night. On visiting them with a lantern, after a showery evening, when I expected to catch the depredators, I was somewhat startled to see on several of my grafts the hairworm, which, adhering to the top of the scion by, I presume, the posterior portion of its body, supported the remainder in the air; and all were moving freely in a kind of gyrating motion, as if ready to seize a prey. No trace of the creatures could be found by daylight; and I did not impute to them the destruction of my buds. I have since seen the hairworm, in the very early morning, on the wet leaves of bushes four feet above the surface of the earth. I have also dug it from about eighteen inches below the surface in the early spring: in this instance I found two individuals coiled together in the hole made by the common earthworm; these were of a paler, somewhat dirty cream-colour; and I kept them alive for a time in a bottle, but they eventually dried up.

Since this, whilst carrying on in my garden that seemingly unavoidable slaughter of slugs, I have on two occasions extracted the *Mermis* from the bodies of the common white slug (*Limax agrestis*). The last instance was in May 1865, when, while killing a small slug about three-quarters of an inch long, with a piece of stick, I saw that I had another worm, and extracted it entire, without injury; it was more than three inches in length, cream-coloured, with a faint dark line, firm and rigid as usual: it surprised me that it could have been carried about in so small a compass. This individual I kept alive some time in a small phial, with a drop of water to keep it moist.

It is easy to speculate on the object the hair-worm has to attain in climbing during or immediately after a shower; possibly it may be the deposition of ova.

Hurstpierpoint, Nov. 1867.

Experiments on the Axolotl. By M. Auguste Duméril.

Since I had the honour of informing the Academy that the Mexican Urodelous Batrachia with external branchiæ, called axolotls, which had never previously been seen living in Europe, had reproduced in the Menagerie of Reptiles, and that many of those born there had undergone metamorphoses *, numerous births have taken place there, and other transformations like the former have occurred. Thus, up to the present time, we have seen sixteen of these animals become covered with yellowish-white spots contrasting with the darker general tint, then lose their branchial apparatus completely, as well as the membranous crest of the back and tail. At the same time the internal organs have undergone changes comparable with those which are observed in the Urodelous Batrachia in passing from the larval to the adult state. Of the four arches supporting the branchiæ which float outside, three have disappeared; the outermost one alone remains, and constitutes the posterior joint of the thyroidean horn. The anterior surface of the bodies of the vertebræ has become less concave. As in all the other Salamandriform Batrachia, a modification has taken place in the arrangement of the dental apparatus of the vault of the palate, the vomerine teeth having changed their place. They were united on each side behind the intermaxillary bone into a small band slightly oblique from in front and within, backwards and outwards; but after the metamorphosis they form, beyond the inner orifices of the nasal fossæ, a nearly transverse row—an arrangement which, with the absence of the posterior palatine teeth, occurs only in the North American tritons called *Amblystomi*, of which the axolotls consequently appear to be the tadpoles. In the lower jaw, to the right and left of the symphysis behind the marginal row, there was a group of small teeth which is no longer to be seen.

Such is a very summary general account of the characteristic facts of a metamorphosis never previously observed, and which possesses

* Comptes Rendus, tome lx. p. 765, and lxi. p. 775: see Annals, ser. 3. vol. xvii. p. 156.